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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/391,861	09/07/1999	ARLEN READ THOMASON	99.371	9209

20306 7590 12/17/2002

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CHICAGO, IL 60606

EXAMINER

NGUYEN, DAVE TRONG

ART UNIT PAPER NUMBER

1632


DATE MAILED: 12/17/2002

24

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. <b>09/391,861</b>	Applicant(s) <b>Thomason</b>
Examiner <b>Dave Nguyen</b>	Art Unit <b>1632</b>



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 25, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-13, 39-43, and 47 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-5, 7-13, 39-43, and 47 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 25, 2002 has been entered as Paper No. 23.

Claims 36-38, 44-46 have been canceled, claims 1, 2, 8, 13, 39, 40, 42 have been amended, claim 47 has been added by the amendment filed September 25, 2002.

In view of applicant's amendment which add new claim 47 which claim an enormous number of sequences by the use of a generic sequence and/or combinations of variants that may fall within the sequence, the following restriction is applicable.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I: Claims 47, 2 and 8, directed to a sequence and/or formula as cited in claim 47, classifiable in Class 536, subclass 23.1, class 435, subclasses 325 and 320.1.

Group II: Claims 1-5, 7-13, 39-43, readable on SEQ ID NO: 4 and sequences which are not necessarily SEQ ID NO: 4 but must possess any of the activities as cited in the laundry list in the as-filed specification, classifiable in class 536, subclass 23.5, class 435, subclasses 325 and 320.1, class 514, subclass 44, class 800 subclass 9.

The inventions are distinct, each from the other because of the following reasons:

The subject matter as claimed in claim 47 is directed to a sequence and/or formula, which embraces an enormous number of sequences which have nothing to do with SEQ ID NO: 4. The sequence

as written is directed to a genus of number of possibilities and/or variants that could be read for potential sequences and sequences which are yet to be discovered, wherein these distinct sequences not only would constitute a number of distinct inventions among themselves, but also no longer share any substantially common structure with SEQ ID NO: 4. Note also that due to limited resources from the US PTO and the breadth of the claims, it would be an undue burden on the examiner and the US PTO to search and examine of all the claimed subject matters as presently embraced by claim 47. Furthermore, each US filed application under 35 USC 121 is only allowed to have one distinct invention for examination. The newly added claim embraces numerous sequences for which not only the US patent office does not have sufficient computer resources to search, but also the examiner would have to engage an undue burden to search and examine for patentability.

**Sequence Rules requirement:**

Claim 47 is objected under Sequence Rules 1.821 because the claim does not conform to the requirements of 37 CFR 1.821 because these claims recite a specific residue number for which there is no indicated SEQ ID NO:\_\_\_ identifier in the claim. The requirement for compliance in 37 CFR 1.821(a)-(c) is directed to "*disclosures of nucleotide and/or amino acid sequences.*" (Emphasis added.) All sequence information, whether claimed or not, that meets the length thresholds in 37 CFR 1.821(a) is subject to the rules. In this instance, claim 47 is directed to an enormous number of particular sequences of more than 10 nucleotide residues, wherein the sequences do not appear to be present in the paper copy of the Sequence listing of record. As such, the sequence listing of record is not fully responsive to the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth above and also on the attached Notice to Comply With The Sequence Rules and the CRF Diskette Problem Report (dated 206/97). Note that each member of the members cited Markush Group of the claim must be in compliance with the requirements of 37 CFG 1.821 in order to examine the claim should the claim be elected. Applicant is requested to return a copy of the attached CRF Diskette Problem Report with the report.

**A complete response to the restriction letter must include a response to the Sequence Rules Requirement as set forth in the immediately preceding paragraph.**

Any inquiry concerning this communication or earlier communications regarding the formalities should be directed to Patent Analyst Kimberly Davis, whose telephone number is **(703) 305-3015**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Dave Nguyen* whose telephone number is **(703) 305-2024**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Deborah Reynolds*, may be reached at **(703) 305-4051**.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is **(703) 305-7401**.

Any inquiry of a general nature or relating to the status of this application should be directed to the *Group receptionist* whose telephone number is **(703) 308-0196**.

Dave Nguyen  
Primary Examiner  
Art Unit: 1633



DAVE T. NGUYEN  
PRIMARY EXAMINER

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING  
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☒ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☒ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☒ 7. Other: See the Reasons as set forth in the restriction letter attached to this notice.

**Applicant Must Provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, **include no new matter**, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

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